Data Usage

- Acceleration from:
  - Chest sensor (x, y, z)
  - Left-ankle sensor (x, y, z)
  - Right-lower-arm (x, y, z)

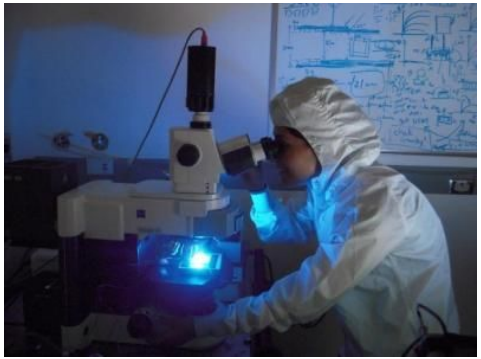
- Gyro from:
  - Left-ankle sensor (x, y, z)
  - Right-lower-arm (x, y, z)

- Magnetometer from:
  - Left-ankle sensor (x, y, z)
  - Right-lower-arm sensor (x, y, z)

- Electrocardiogram signal

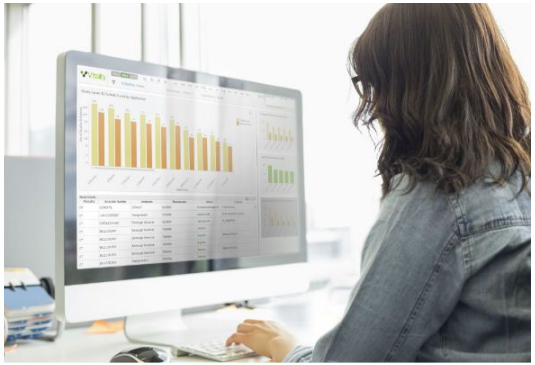
Data Usage

The main Business Case is Mobile Health Analytics based in:



Diagnose particular diseases

Care Management



Monitor movements

Data Definition

- Human Activity Recognition based on vital signs recordings
- Detect injuries
- Detect illnesses
- Detect diseases
- Detect prohibited movements
- Fall detection
- Risk estimation in elderly

Value and availability of the data

This data is available in http://www.datasciencecentral.com/profiles/blogs/10-great-healthcare-data-sets.

These data are valuable in a scale:

5

The availability data is easy in a scale:

5

Priorities of the data

Collect the data of the sensors

Pre-processing and normalization of the data.

Categorizing the activities types and group them.

Apply Random Forest to classify activities, injuries, diseases, illnesses, prohibited movements, fall and risk.

Analysis and Data Visualization.